

CLAIMS

1. A substantially flat product of plastic material, which is transparent at least in part and at least part of the exterior surface of which comprises an overmolded addition of plastic material.

2. A product according to claim 1, **characterized in that** at least part of the addition of plastic material is encapsulated at the periphery of the product.

3. A product according to claim 2, **characterized in that** it has a core of plastic material, a skin which comprises at least one film of plastic material supporting a scratch-resistant layer and is disposed on at least one face of the core, set back from the edges thereof, on the interior of the surface bounded by the encapsulated peripheral part of the addition of plastic material.

4. A product according to claim 3, **characterized in that** the skin, whose thickness is at most equal to 500 μm , preferably between 50 and 300 μm , comprises one or more films of thermoformable plastic material, between which there is interposed or on which there is deposited, depending on the case, at least one functional layer, at least one of these films also being able itself to comprise such a functional layer.

5. A product according to claim 4, **characterized in that** the said thermoformable plastic material is chosen from the group comprising polycarbonate, polypropylene, poly(methyl methacrylate), ethylene/vinyl acetate copolymer, poly(ethylene terephthalate), polyurethane, polyvinylbutyral and cycloolefin copolymer.

6. A product according to one of claims 3 to 5, **characterized in that** the skin comprises the hydrophobic/oleophobic function, which is incorporated into the scratch-resistant layer, or is grafted onto or even covers this layer with interposition of a plastic support film of the hydrophobic/oleophobic layer.

7. A product according to one of claims 3 to 6, **characterized in that** the skin comprises, over all or part of its surface, a decorative and/or masking layer, preferably

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positioned directly under the support film of the scratch-resistant layer.

8. A product according to one of claims 3 to 7, **characterized in that** the skin comprises one or more optically selective layers.

9. A product according to one of claims 3 to 8, **characterized in that** the skin comprises a stack of antireflective layers.

10. A product according to one of claims 3 to 9, **characterized in that** the skin comprises an electrically conductive network.

11. A product according to one of claims 3 to 10, **characterized in that** the core comprises a thermoplastic substance such as polycarbonate, poly(methyl methacrylate), ethylene/vinyl acetate copolymer, poly(ethylene terephthalate), polyurethane, cycloolefin copolymer or an ionomeric resin, or a thermosetting or thermally cross-linking substance of the polyurethane, unsaturated polyester, ethylene/vinyl acetate copolymer type, or even an association of a plurality of thicknesses of any one or more of these plastic materials.

12. A product according to one of claims 2 to 11, **characterized in that** the encapsulated peripheral part of the addition of plastic material comprises one or more elastomeric substances, especially thermoplastics.

13. A process for manufacture of a product according to one of claims 1 to 12, comprising the injection of a first and then of at least a second plastic material into a single mold.

14. A process according to claim 13, comprising an operation of transfer of the product of injection of the first plastic material by rotation from a first die, in which injection of the first plastic material was achieved as the first step, into a second die used for subsequent injection of the second plastic material.

15. A process for manufacture of a product according to one of claims 1 to 12, comprising the injection of a first plastic material into a first mold and then the transfer of the product of this injection into a second mold, into which there is injected a second

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plastic material.

16. A process according to one of claims 13 to 15, wherein one or two skins, possibly thermoformed beforehand, are held at the bottom of the mold by any appropriate means, especially by suction and/or blowing and/or electrostatic effect, before injection of the said first plastic material.

17. A process according to one of claims 13 to 16, comprising an initial operation of formation of an electrically conductive network by metal screen printing.

18. The application of the product according to one of claims 1 to 12 as glazing for transportation vehicles or for buildings.

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